

APRIL/MAY 2025

**23UDA41 — RELATIONAL DATABASE
MANAGEMENT SYSTEM**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List any two characteristics of a DBMS.
2. Define an Entity in the Entity-Relationship Model.
3. State Primary Key and Foreign Key.
4. List out any two key points of First Normal Form.
5. What is the purpose of the COMMIT statement in SQL?
6. Write any two Differences between DELETE and TRUNCATE commands.
7. What is PL/SQL?
8. List the purpose of a PL/SQL Procedure.
9. State the term "Trigger".
10. What is the role of loops in an Explicit Cursor?



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Differentiate between Hierarchical, Network, and Relational Database Models.

Or

- (b) Explain the different types of database architectures.

12. (a) Describe the various Set Operations in Relational Algebra with examples.

Or

- (b) Explain the importance of Functional Dependency in database normalization.

13. (a) Describe the use of Single Row Functions in SQL with examples.

Or

- (b) What are Subqueries? Explain Scalar and Multiple Row Subqueries with examples.

14. (a) Explain the structure of a PL/SQL block with an example.

Or

- (b) Explain the PL/SQL Character Set and its importance.

15. (a) What are User-Defined Exceptions? How are they handled in PL/SQL?

Or

- (b) Describe the different types of Triggers in PL/SQL.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the steps involved in the System Development Life Cycle (SDLC).

17. Discuss the different types of Join operations in Relational Algebra with examples.

18. Explain Transaction Control Language (TCL) commands in SQL in detail.

19. Describe the process of creating and using Functions in PL/SQL with an example.

20. Discuss the working of Implicit and Explicit Cursors with an example program.

